Big Cypress National Preserve was established by Congress on October 11, 1974 (Public Law 93-440). It is located in Southwest Florida within three counties: Collier, Monroe, and Dade.

Big Cypress National Preserve provides numerous recreational opportunities for south Florida visitors. Bird watching, camping, canoeing, bicycling, off road vehicles and wildlife observations are common activities for visitors to the 729,000-acre Preserve. Administered by the National Park Service, the Preserve was authorized in 1974 to protect the water quality and to ensure the natural and ecological integrity of the Big Cypress Swamp. Traditional land uses, which are permitted under the enabling legislation, include hunting, trapping and fishing within the Preserve.

First-time visitors to the Big Cypress see a flat, wet, primitive land. The area was named Big Cypress because of its extent, not because of the size of its trees, and visitors drive for miles through an expanse of open prairies dotted with cypress trees, distant pinelands, and tree islands broken at intervals by dark, forested swamps. On the whole, first impressions are likely to be of an inhospitable land, with no firm ground beyond the highway shoulders.

Water is the principal natural resource of the entire south Florida region, and about 90 percent of Big Cypress is flooded during the wet season. Because of the high annual rainfall (mean annual precipitation is 54 inches, with approximately three-fourths falling during the summer) and the flat limestone topography (a seaward slope of 2 inches per mile), the inundation lasts for several months beyond the actual rainfall period. Because the Preserve is relatively undeveloped, it serves as a large natural reservoir and nutrient filter, permitting natural biological processes to nourish diverse ecological communities distinctive to south Florida. Throughout the wet season the water flows out of the Preserve in a southwesterly direction through the estuaries of western Everglades National Park. The ecology of the Preserve is finely tuned to the seasonal flow of water, and any interference can alter this sensitive subtropical habitat.

Extensive prairies and marshes, forested swamps, and shallow sloughs characterize the Preserve. Hydroperiod, the amount of time each year that soils are saturated, is the major determinant of vegetation communities, and a difference of only a few inches in elevation subsequently changes the hydroperiod and leads to the establishment of totally different plant communities.

The Big Cypress National Preserve is home to many mammals, birds, and reptiles unique to Florida's climate. It is easy to view and appreciate Florida's largest reptile, the American alligator, living here in its natural environment. Anhingas, egrets, and herons are found in plentiful numbers feeding, displaying courtship feathers, and nesting in and among the Cypress trees. Occasionally, one can witness river otter, bobcats, black bear, and the endangered Florida panther on the Preserves' back roads and trails.

Cultural resources found in the Big Cypress National Preserve provide clues to life in the Big Cypress Swamp for the earliest native inhabitants to the pioneer communities established in the late part of the 19th century. Life was tightly tied to the diversity and abundance of the natural resources found in the Cypress Swamp for food, shelter, and economic necessity.

Recreational activities in the Preserve today include hunting, off-road vehicle driving, fishing, camping, and hiking. White-tail deer and feral hogs are the most popular large game animals among the hunters. Fishing is popular in borrow canals along major roads, and the canals are also prime locations for wildlife viewing. Canoeing along Turner River and Halfway creek provide anglers and recreational boaters opportunities to explore more remote areas of the Preserve. Bicycling gravel roads and limerock trails provides scenic vistas and access to a variety of habitats found in the Preserve. Campgrounds and undeveloped campsites are used mainly by hunters and winter visitors. The principle hiking trail in the Preserve is the Florida National Scenic Trail.

Big Cypress is the only south Florida National Park area where personal off-road vehicles (ORV), including airboats, are allowed. The Off Road Vehicle Plan for the Preserve went into effect the fall of fiscal year 2000. The signing of the Record of Decision kicks off the implementation of the restriction of such use to designated trails. This *Strategic Plan* will cover the work associated with the designation of a total of 400 miles of trails as well as work accomplished in the restoration of disturbed areas that resulted from the unregulated use of ORV's. Trail designation will be accomplished over an estimated ten-year period.

The Preserve is predominately composed of wetlands and is subject to many influences originating from outside its boundary. Water is the life - blood of the swamp, and the Preserve is but one-third of the watershed, thus any alteration to water flowing into the Preserve deserves immediate concern. Any land use adjacent to, or upstream from, the Preserve that alters the habitat and/or water quality, quantity, hydro-period or pattern affects the success of resource protection efforts particularly in the areas of hydrology, wildlife, and vegetation. The National Park Service cooperates fully with the primary agencies regulating and permitting land development and habitat alteration. These are the U.S. Army Corps of Engineers (Corps), Florida Department of Environmental Protection, Florida Department of Community Affairs, U.S. Fish and Wildlife Service, and the South Florida Water Management District (SFWMD).

Despite the mandates of these agencies, the protection of the watershed from further alteration as a result of agriculture, residential, industrial, or commercial development may be considered inadequate. In the Big Cypress Watershed land development usually requires water management planning as well as mitigation of potential impacts to threatened or endangered (T&E) species. If these operations are approved by the permitting agencies, monitoring for compliance is difficult and the potential always exists for undetected changes. Zoning and permitting stipulations do not always protect against adjacent land subdivision or secondary impacts from alteration such as exotic plant invasion from disturbed sites, agriculture runoff of fertilizers and pesticides, sheetflow alteration from road, canal, or borrow pit construction, or habitat fragmentation and area avoidance by T&E species. These problems are compounded by a deficit of baseline information regarding the Preserve resources. While the National Park Service strives to close the gaps in the respective databases, there are many obstacles that inhibit these efforts. Current laws, for example, tend to require the National Park Service to conduct and fund monitoring programs in order to have reliable information to prove a case in defense of wetland and habitat protection in response to a development proposal. A more equitable scenario would be for the laws to place the burden upon adjacent developers to justify and monitor their own proposals in order to assure that water resources, environmental quality, and habitat preservation efforts will not be adversely affected as a result.

Agricultural development (principally citrus) already is extensive and expanding to the north of the Preserve boundary. The external drainage of Mullet and Okaloacoochee Sloughs pass through the northern portion of the Preserve. The real and potential pollution of these natural drainage areas with agricultural associated pesticides and fertilizers cannot be discounted.

A 15-mile levee and canal separate a portion of the eastern boundary from the SFWMD Conservation Area 3A to the east. The levee has functioned for several decades to impound water in Area 3A, thus affecting the quantity of water, which would otherwise seasonally inundate several thousand acres of the Preserve. An agreement with the SFWMD and the Corps will provide for modification to the levee and canal and should result in a return to more historic, natural water flow patterns. These patterns however will remain subject to the SFWMD attempts to meet flood control, agricultural and human consumption needs.

State Road 29 and the adjoining Barron River Canal form the Preserve western boundary. This approximately mile-wide area was acquired in December 1996 as a result of the Florida/Arizona land exchange. The area currently contains private residences, small commercial establishments, back-country camps, and until fully acquired provides and opportunity for uncontrolled access into the Preserve. The canal drains Deep Lake Strand within the Preserve and a larger agricultural area to the north beyond the Preserve boundary. A series of weirs placed along the canal are operated by the SFWMD. Little is known of the environmental impacts associated with this canal drainage or of the placement and/or necessity of the weirs, or of their operation schedule. Sediments in this canal have also tested positive for the highest concentrations of potentially hazardous constituents found in pesticides that have ever been recorded in the State. This is most probably attributable to the agricultural runoff draining into the canal from north of the Preserve boundary. The affects of the Barron River Canal on the Preserve will be subject to Preserve management and restoration in order to correct the unnatural drainage and pollution impacts.

Further to the west and northwest in the Big Cypress Watershed lies the Golden Gate Estates, a 121,000-acre housing subdivision whose cumulative impacts on water quality, area drainage and increased wildfire danger have been recognized by the State. In an effort to reduce the environmental damage resulting from roadway and canal construction, non-native plant infestations, and wildfire fuel loading, a process of

acquisition and reclamation of this real estate development area under the State- administered Conservation and Recreational Lands program has been initiated.

The regional human population of south Florida currently exceeds 5 million and is expanding rapidly. Tourism is a major industry, much of the area's attraction being due to remaining natural areas and their living resources. The most heavily urbanized area of the entire state of Florida is concentrated along the lower east coast in Palm Beach, Broward, and Dade counties. The west coast of Charlotte, Lee, and Collier counties represents the State's fastest growing urban area. Human alterations due to urbanization within the hydrologic system have created water quality and quantity problems for south Florida's natural systems. Known wildlife populations are now a fraction of their size of predrainage of south Florida. According to the scientific community involved with the ecosystem restoration efforts for south Florida, the pace of deterioration of the natural system seems to be increasing as a result of urbanization. In addition to the effects on the hydrologic resources, this urbanization results in soil subsidence, nutrient enrichment, pollution by contaminants, introduction of invasive non-native plants and animals, fragmentation of habitats and landscapes, loss of wetland areas and functions, altered fire regimes, and declines in coastal and estuarine resources.

The integrity of water flowing within the Preserve is partially dependent upon the quality of the water within the larger Big Cypress Watershed. The overall direction of hydrological management will be to allow no degradation of ambient water quality, to maintain and restore as necessary natural water quantity, timing, and duration, and to avoid further hydrological disturbances. This concept can be expanded to include: air quality within the regional airshed; integrity of native vegetation at risk of invasion by exotic floral communities from seed sources outside the Preserve; integrity of wildlife habitat and egress/ingress corridors; and entry of wildfire onto Preserve lands from adjacent lands. The National Park Service will continue to work with the State agencies, local governments, adjacent landowners, and other Federal agencies to address these issues as they directly impact the resources within the Preserve.